

# Health Care Innovation Initiative

# **Executive Summary**

Femur/Pelvis Fracture Episode Corresponds with DBR and Configuration file V3.0

Updated: January 2, 2020

### **OVERVIEW OF A FEMUR/PELVIS FRACTURE EPISODE**

The femur/pelvis fracture episode revolves around patients who receive a surgical treatment for a femur/pelvis fracture. The trigger event is an inpatient admission with a femur/pelvis fracture procedure. All related care – such as anesthesia, imaging and testing, surgical and medical procedures, evaluation and management, and medications – is included in the episode. The quarterback, also called the principal accountable provider or PAP, is the clinician or group performing the procedure for the femur/pelvis fracture. The femur/pelvis fracture episode begins 60 days before the triggering inpatient admission and ends 60 days after discharge.

### **CAPTURING SOURCES OF VALUE**

Providers have multiple opportunities during a femur/pelvis fracture episode to improve the quality and cost of care. Important sources of value include follow-up care to decrease the likelihood of post-discharge readmissions and ED visits, as well as appropriate use of narcotics. Other important sources of value include the choice of orthopedic hardware to treat the fractures, ensuring patients receive necessary counseling (e.g., smoking cessation treatments) and education to foster proper bone healing and to avoid re-injury, and coordinating appropriate discharge planning to encourage mobility and to support rehabilitation.

To learn more about the episode's design, please reference the Detailed Business Requirements (DBR) and Configuration File on our website at <a href="https://www.tn.gov/tenncare/health-care-innovation/episodes-of-care/searchable-episodes-table.html">https://www.tn.gov/tenncare/health-care-innovation/episodes-of-care/searchable-episodes-table.html</a>.

# Illustrative Patient Journey

1 Acute presentation

Outside of care setting

- Patient experiences signs and symptoms of a femur or pelvic fracture after an event (e.g., fall, sports injury)
- Patient may contact emergency medical services, PCP, orthopedist, and/or other providers and is referred to the Emergency Department if they do not initially present there

2 Assessment

Emergency Department (ED)

- Patient is stabilized and has history and physical exam taken
- Patient receives pain control and imaging (e.g., x-ray, MRI, CT) to assess the potential fracture
- Patient is admitted for ongoing treatment

3 Procedure

Inpatient hospital

- Patient is prepared for procedure (pre-operative pulmonary/cardiac assessments) if necessary and given appropriate levels of anesthesia
- Procedure will vary based on if fracture is of the distal femur, femur shaft, proximal femur, or pelvis
- Certain cases of femoral head or neck fractures may merit partial or total hip replacement
- Patient may receive closed reduction, intramedullary rods, percutaneous fixation or open reduction and internal fixation for femoral, acetabular or pelvic fractures

4 Follow-up care

All episodes

Home, office, outpatient hospital, IRF, SNF

May not be experienced by all patients

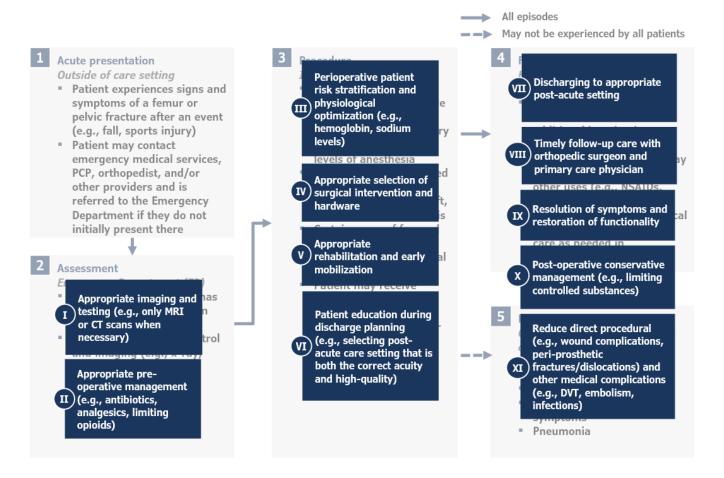
- Patient has follow-up visits with the clinical team and additional imaging is performed as necessary
- Appropriate medications may be prescribed for pain and other uses (e.g., NSAIDs, blood thinners)
- Patient may undergo physical therapy or receive nursing care as needed in appropriate setting

5 Potential complications

Office, outpatient hospital, ED, or inpatient hospital

- Surgical site infection / bleeding
- DVT / PE
- Continuation of pain / symptoms
- Pneumonia

## Potential Sources of Value



#### ASSIGNING ACCOUNTABILITY

The quarterback of the episode is the specific health care provider deemed to have the greatest accountability for the quality and cost of care for the patient. To state it differently, the quarterback is the provider who has the greatest ability to influence all of the health care delivered in a given episode. For the femur/pelvis fracture episode, the quarterback is the clinician or group who performed the procedure. The contracting entity or tax identification number of the clinician or group performing the femur/pelvis fracture procedure will be used to identify the quarterback.

### MAKING FAIR COMPARISONS

The episode model is designed to be fair to providers and incentivize best practices without penalizing providers who care for sicker patients. As such, important aspects of the model are:

- Inclusion of only the cost of services and medications that are related to the femur/pelvis fracture in calculation of episode spend.
- Exclusion of episodes when clinical circumstances create the likelihood that the case will deviate substantially from the typical care path or when claims data is likely to be incomplete.
- Risk adjusting episode spend to account for the cost of more complicated patients.

The femur/pelvis fracture episode has no pre-trigger window. During the trigger window, all services and specific medications are included. The post-trigger window 1 includes care for specific diagnoses, specific anesthesia, related evaluation and management visits, specific imaging and testing, specific medications, and specific surgical and medical procedures. The post-trigger window 2 includes specific surgical and medical procedures, specific anesthesia, and opioid medications.

Some exclusions apply to any type of episode, i.e., are not specific to a femur/pelvis fracture. For example, an episode would be excluded if more than one payer was involved in a single episode of care, if the patient was not continuously insured by the payer during the duration of the episode, or if the patient had a discharge status of 'left against medical advice'. Examples of exclusion criteria specific to the femur/pelvis fracture include patients who present with an open femur/pelvis fracture, severe trauma, coma, or paralysis. These patients have significantly different clinical courses that the episode does not attempt to risk adjust. Furthermore, there may be some factors with a low prevalence or significance that would make accurate risk adjustment difficult and may be used to exclude patients completely instead of adjusting their costs.

For the purposes of determining a quarterback's cost of each episode of care, the actual reimbursement for the episode will be adjusted to reflect risk factors

captured in recent claims data in order to be fair to providers caring for more complicated patients. Examples of patient factors likely to lead to the risk adjustment of a femur/pelvis fracture episode include nutritional/metabolic disorders, thrombophlebitis, tobacco use, or osteoporosis/osteopenia. Over time, a payer may adjust risk factors based on new data.

## **MEASURING QUALITY**

The episode reimbursement model is designed to reward providers who deliver cost effective care AND who meet certain quality thresholds. A quarterback must meet or exceed all established benchmarks for any quality metric tied to gain sharing in order to be eligible to receive monetary rewards from the episode model. Other quality metrics may be tracked and reported for quality improvement purposes but may not be tied directly to gain sharing.

The quality metrics linked to gain sharing for the femur/pelvis fracture are:

- Related follow-up care: Percentage of valid episodes with related follow-up care during post-trigger window 1 (higher rate indicative of better performance)
- Difference in Average MED¹/day: Average difference in morphine equivalent dose (MED)/day during the post-trigger opioid window and the pre-trigger opioid window, across valid episodes (lower value indicative of better performance)

The quality metrics that will be tracked and reported to providers but that are not tied to gain sharing are:

- Average MED/day during the pre-trigger opioid window: Average morphine equivalent dose (MED)/day during the 1-60 days prior to the trigger window (lower value indicative of better performance)
- Average MED/day during the post-trigger opioid window: Average morphine equivalent dose (MED)/day during the 31-60 days after the trigger window (lower value indicative of better performance)

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<sup>&</sup>lt;sup>1</sup> MED: morphine equivalent dose

- Related readmission: Percentage of valid episodes with a related readmission during post-trigger window 1 (lower rate indicative of better performance)
- ED visit: Percentage of valid episodes with a related ED visit during post-trigger window 1 (lower rate indicative of better performance)
- Complication: Percentage of valid episodes with a surgical complication during the trigger window and post-trigger window 1 (lower rate indicative of better performance)
- Mortality: Percentage of total (valid and invalid) episodes resulting in death in the episode window (lower rate indicative of better performance)
- Opioid and benzodiazepine prescriptions: Percentage of valid episodes with both an opioid prescription and a benzodiazepine prescription filled during the trigger and post-trigger window (lower rate indicative of better performance)

It is important to note that quality metrics are calculated by each payer on a per quarterback basis across all of a quarterback's episodes covered by that payer. Failure to meet all quality benchmarks tied to gain sharing will render a quarterback ineligible for gain sharing with that payer for the performance period under review.